

Comments

on the Basel Committee on Banking Supervision
Consultative Document on
*"Reducing variation in credit risk-weighted assets –
constraints on the use of internal model approaches"*

Contact:

Dr Uwe Gaumert

Director

Telephone: +49 30 1663-2150

Fax: +49 30 1663-2199

E-Mail: uwe.gaumert@bdb.de

Berlin, 24 June 2016

The **German Banking Industry Committee** is the joint committee operated by the central associations of the German banking industry. These associations are the Bundesverband der Deutschen Volksbanken und Raiffeisenbanken (BVR), for the cooperative banks, the Bundesverband deutscher Banken (BdB), for the private commercial banks, the Bundesverband Öffentlicher Banken Deutschlands (VÖB), for the public banks, the Deutscher Sparkassen- und Giroverband (DSGV), for the savings banks finance group, and the Verband deutscher Pfandbriefbanken (vdp), for the Pfandbrief banks. Collectively, they represent approximately 1,700 banks.

Coordinator:

Association of German Banks

Burgstraße 28 | 10178 Berlin | Germany

Telephone: +49 30 1663-0

Telefax: +49 30 1663-1399

www.die-deutsche-kreditwirtschaft.de

Comments on the BCBS Consultative Document on constraints on the use of internal model approaches

Contents

1. General remarks	3
2. Specific remarks	5
2.1 Scope of use of internal model approaches	5
2.1.1 Fundamental considerations	5
2.1.2 Variability in model output	7
2.1.3 Portfolio modellability	9
2.2 Use of floors	12
2.2.1 Floors for capital requirements (output floors)	12
2.2.2 Floors for risk parameters (input floors)	13
2.3 Parameter estimation requirements	15
2.3.1 Probability of default (PD)	15
2.3.2 Loss given default (LGD)	16
2.3.2.1 Foundation IRB approach	16
2.3.2.2 Advanced IRB approach	17
2.3.3 Exposure at default (EAD) and credit conversion factors	17
2.3.4 Credit risk mitigation	18

Comments on the BCBS Consultative Document on constraints on the use of internal model approaches

Dear Sir,
Dear Madam,

On 24 March 2016, the Basel Committee on Banking Supervision (BCBS) published a consultative document on constraints on the use of internal model approaches. We are grateful for the opportunity to comment as follows:

1. General remarks

The BCBS aims to reduce the variability in banks' capital requirements that are not explained by different risks. To do so, it proposes in particular prohibiting the use of the IRB approaches for certain portfolios (banks and large corporates) or heavily restricting it (specialised lending). In addition, it proposes setting floors for risk parameter estimation (probability of default (PD) and loss given default (LGD)) and, not least, introducing further requirements for parameter estimation.

We support the BCBS's aim of reducing the not actually explicable variability in risk estimation. In our view, the starting point here should, however, be the regulatory requirements for parameter estimation. The BCBS should build on the extensive work currently being performed by the European Banking Authority (EBA) to harmonise the minimum IRB approach requirements, particularly the requirements for risk parameter estimation, across the EU.

We are strongly against the proposed removal of the IRB approaches for certain portfolios. For one thing, this would dramatically diminish the risk sensitivity of capital requirements. This may lead to undesirable and dysfunctional effects at banks and to a destabilisation of the financial system. For another thing, derecognition of internal model approaches would diminish the incentives for banks to use and further develop sophisticated measurement techniques for risk management in these areas.

We also take a critical view of the restrictions on the range of eligible risk-reducing collateral associated with the proposals. This would affect particularly banks which use the advanced IRB approach and would be forced to revert to the foundation IRB approach or the standardised approach. As regards the amended requirements for the recognition of eligible real estate collateral, it is vital to ensure that, where highly developed and long-standing markets are involved, income-producing real estate (IPRE) collateral can also continue to be fully recognised in every case as risk-mitigating. This could be made clear in paragraphs 507-508 of the rules text (with regard to the outlined changes to the *Additional guidance for completing the IRB quantitative impact study*). In this context, it could also be clarified in the IPRE definition that only IPRE where the borrower obtains a material influence on the financed property and can also influence the income gained from the property constitutes specialised lending (paragraph 219, third point in conjunction with paragraph 226 of the rules text).

The proposals for calculation of LGDs under the F-IRB approach and the new LGD floors under the A-IRB approach are inappropriate, in our view, for comfortably over-secured loans. They would diminish the incentives for low-risk lending to the real economy against "other physical collateral". This would affect, among other things, the provision of loans secured by physical collateral such as cars, transport finance and leased assets (asset-based lending). Banks have extensive empirical data on the value of collateral in

Comments on the BCBS Consultative Document on constraints on the use of internal model approaches

these areas so that reliable recovery rate assumptions can be made. These are regularly substantiated by LGD validation. Significantly lower LGD floors are therefore justified, in our view, for this type of collateral.

We welcome the BCBS's intention to ensure that the work on finalising Basel III – widely referred to as Basel IV – does not lead to any overall increase in banks' capital requirements. This should, in our view, also apply to the redesign of the IRB approaches and to banks using the IRB approaches.

Application of the standardised approach to large corporates and specialised lending would lead, *ceteris paribus*, to a significant increase in capital requirements. This is due, above all, to the fact that because of the partly low level of external rating coverage only a 100% risk weight can be used in many cases. This would also affect small and medium-sized companies belonging to consolidated groups with total assets exceeding EUR 50 billion. For this reason, companies with independent credit status that do not benefit from any direct statutory or contractual liability on the part of the group parent company should definitely be treated as independent entities for IRB approach differentiation purposes.

Higher capital requirements would also adversely affect specialised lending, which is highly important economically. In the commercial real estate finance segment, many investment projects are specialised lending. The same goes for project finance, which plays a major role in promoting renewable energy and in funding infrastructure projects.

The proposals would have negative implications especially for those banks which have specialised in exposure classes in which the BCBS intends to remove the IRB approaches. Even if the capital requirements in these areas were to remain the same across all banks, particularly banks that have specialised in low-risk business would be adversely affected.

It is also important that the equity-related incentives to use advanced risk measurement techniques associated with use of the IRB approaches are retained. This should also apply to the transition from the F-IRB approach to the A-IRB approach.

With regard to the PD estimation requirements, we regard the requirement to consistently use through-the-cycle approaches as inappropriate. It would also fail to reduce the complexity of the IRB approaches.

We welcome, not least, that the BCBS intends to estimate the implications of the proposals by means of a quantitative impact study (QIS). At the same time, we believe that the QIS based on the IRB approaches is suitable only to a limited extent for assessing the aggregate effect of all the new requirements. In particular, the interaction with other (non-risk-sensitive) metrics such as the leverage ratio cannot be estimated in this way.

The present consultative document on constraints on the use of internal model approaches must be viewed in conjunction with the two other key consultative documents on the review of the standardised approach to credit risk and the design of capital floors. We strongly recommend circulating the full package for consultation once again prior to its adoption, as the IRB approaches, the standardised approach to credit risk and capital floors are issues that cannot be seen separately from each other. In this respect, we also wish to point out that other BCBS initiatives on individual issues, e.g. *Prudential*

Comments on the BCBS Consultative Document on constraints on the use of internal model approaches

treatment of problem assets – definitions of non-performing assets and forbearance, Revisions to the Basel III leverage ratio framework or Review of the Credit Valuation Adjustment (CVA) risk framework should be seen in an overall context, as these issues have an interactive impact.

2. Specific remarks

2.1 Scope of use of internal model approaches

2.1.1 Fundamental considerations

The BCBS aims to restrict the scope of use of the IRB approaches. In particular, application of the IRB approaches to exposures to banks and large corporates is no longer to be allowed. In future, the (modified) standardised approach to credit risk is to be used for these exposure classes. For specialised lending, only use of the slotting approach will be permitted under the IRB approaches. Alternatively, these exposures can also be treated according to the standardised approach. In addition, the advanced approach is no longer to be used in future to estimate CVA risk.

We are strongly opposed to these proposals.

Restricting use of the IRB approaches in the areas specified would significantly diminish the risk sensitivity of the regulatory capital requirements. For externally rated banks and corporates, differentiation of the capital requirements according to customers' credit status is much less pronounced under the standardised approach than under the IRB approaches. Under the standardised approach, there are only four different risk weights ("base risk weights") for rated banks and corporates (including specialised lending). The worst of these is unlikely to be applied often to such customers.

Under the standardised approach, there is only one risk weight in each case for non-rated corporates and for specialised lending with no external rating. It should be borne in mind in this respect that usually no external rating for specialised lending is available in practice and that, for practical reasons, such a rating cannot be commissioned by banks. There is also little risk-based differentiation in the slotting approach for specialised lending under the IRB approaches. The regulatory capital requirements would thus lose heavily in risk sensitivity although banks have sufficient information to assess risk properly. Ultimately, very well collateralised loan exposures would be encumbered with unduly high capital requirements. This would hamper lending in the areas of, for example, infrastructure investment (also public-private partnerships), renewable energy and other real asset investment. Adverse effects on the real economy (job losses, delay in heavier use of renewable energy, etc.) would be the consequence.

For large corporate customers as well, external rating coverage is lower than one would suspect. In addition, since the "Total assets exceeding EUR 50 billion" differentiation criterion has to be applied at group level, many small corporates belonging to a group would have to be treated according to the standardised approach. These then would definitely not have any external rating. The latter factor in particular would lead to no more than half the corporate customers that are to be treated according to the

Comments on the BCBS Consultative Document on constraints on the use of internal model approaches

standardised approach under the BCBS' proposals having an external rating. The conceivable alternative of applying an approach based on the group rating would not be suitable for capturing risk appropriately. Ultimately, it would be advisable to gear the differentiation criterion to the solo level and not the group level. This would allow banks to perform their own modelling more often and would also reflect their in-depth knowledge with regard to their clients.

In addition, the BCBS would like to avoid volatile changes in capital requirements that may occur where the thresholds (EUR 50 billion and EUR 200 million) are exceeded (cliff effects) by basing categorisation on average figures over a number of years. We should like to point out in this respect that the practical experience made in connection with the differentiation of SME exposures shows that establishing appropriate processes may pose a challenge to banks.

Not least, we should like to point out that small banks and insurance firms usually do not have any external rating.

Due to the lack of differentiation in regulatory capital requirements based on the actual risk exposure of individual lines of business that use of the standardised approach or the slotting approach would involve, integrated bank management would no longer be possible in our view. Economic and regulatory capital would drift apart (again). In their planning, banks would be compelled – as a subsidiary condition at any rate – to take regulatory capital into account in addition to internally calculated economic capital. This harbours the danger of undesirable effects that may also impact lending. These drawbacks of low risk differentiation are important particularly in view of the high exposure levels in the areas in which the IRB approaches are to be removed.

The proposed changes do not appear to make sense from an internal risk management perspective either. Recent regulatory initiatives in the form of SREP add-ons or the Pillar I plus approach mean that internal models assume even greater significance for internal management as well and thus implicitly assign more importance to Pillar I. The congruency of regulatory requirements under Pillar I and internal risk management interests under Pillar II creates a clear incentive to design the internal model approaches used fairly and appropriately. The proposed changes would, however, result in different treatment of risk under Pillars I and II. We believe this may lead to wrong risk management incentives.

In addition, the ban on using supervisory approved internal rating systems to determine capital requirements in certain exposure classes would weaken banks' internal risk management. For banks, this would, in particular, diminish the incentives to use and further develop sophisticated risk measurement techniques in these classes. The internal rating systems eligible for use under the IRB approaches are models approved by supervisors that have undergone close examination for consistency across banks. Changes have to be notified to supervisors; depending on the content and scale of the changes made, additional inspections by supervisors are required. On top of this, models are examined once a year by banks' Internal Audit. This ensures a very high quality standard.

The heavy use and intensive maintenance of sophisticated rating systems at banks are, in our view, due not least to their supervisory recognition for measurement of capital requirements. Because of the high costs entailed in developing and maintaining such systems, there ought to be a supervisory interest in using the results as far as possible under Pillar 1 as well. This goes particularly for the extremely complex

Comments on the BCBS Consultative Document on constraints on the use of internal model approaches

rating systems for specialised lending. Experience from other areas also shows that using internal risk assessments in calculation of capital requirements has a positive impact on the quality of data.

Derecognition of internal rating systems for calculation of capital requirements under Pillar I would be unreasonable particularly also because banks will continue to operate rating systems in their current form for other supervisory (e.g. EBA stress test, Pillar II) and accounting (e.g. IFRS 9) purposes. The proposals for calculation of capital requirements under the standardised approach to credit risk stipulate that banks should not rely mechanistically on external credit ratings. They should instead have their own methods of assessing creditworthiness whereby they check external ratings and assess counterparties with no external rating. The BCBS guidance on credit risk and accounting for expected losses also expects banks to make comprehensive efforts of their own when measuring credit risk¹.

To this end and as part of appropriate risk management, rating systems that satisfy all supervisory requirements have to be used. The high cost of operating, validating and further developing internal rating systems would thus no longer be offset in future by any risk-compatible capital relief under the Pillar I regulatory capital requirements.

The use of standardised approaches would also result in the knowledge banks possess of the risks of certain types of finance no longer being used to calculate regulatory capital. This goes for the slotting approach to specialised lending as well. Because of the rating criteria set by supervisors, the knowledge banks possess of transaction specificities would remain unused when assessing risk. Due also to the lack of risk differentiation, the use of this approach would be a serious step backwards in the rating of specialised lending.

Not least, there is the danger that in the areas in which no external ratings are available high-risk and high-margin business would have to be backed in future with exactly the same amount of capital as low-risk – and thus seemingly unprofitable – lending. This would, in our view, create incentives to take on higher risks that would adversely affect the stability of the financial system. Furthermore, because of the non-risk-compatible cost of capital, banks would be squeezed out by other, less regulated lenders in the areas in which they can no longer use the IRB approach. This would adversely affect the stability of the financial system.

2.1.2 Variability in model output

The BCBS justifies its proposal to remove the IRB approaches in the specified exposure classes by referring particularly to the wide spread of risk-weighted assets (RWAs) in these exposure classes. While stating that the studies conducted in this connection showed that most of the variability in average RWAs between banks can be explained by differences in the risks incurred, the BCBS says that a further 25% remains which it believes can only be explained by different approaches on the part of banks and

¹ "The Committee expects banks to rely primarily on their own credit risk assessments in order to evaluate the credit risk of a lending exposure, and not to rely solely or mechanistically on ratings provided by credit rating agencies (where the latter are available)." (S. 32)

Comments on the BCBS Consultative Document on constraints on the use of internal model approaches

supervisors. In this context, the BCBS finds that there is a high degree of consistency in banks' assessments of the relative riskiness of their customers and that variability is to be found more in the basic level of risk assessment.

We welcome the BCBS's intention to reduce variability in the capital requirements for credit risk that cannot be explained by differences in risk. Yet, at the same time, we should like to point out that internal modelling that takes into account the individual characteristics of a bank inevitably always produces a certain degree of variability in output when assessing hypothetical test portfolios. This is, we believe, inherent in such modelling. Variability cannot be completely eliminated in our view.

In addition, we should like to point out that specialised lending was not included in supervisory benchmarking. It is thus at least questionable whether the findings in regard to corporate customers also apply to such exposures.

To reduce the observed variability in the level of risk assessment by banks, the BCBS proposes the following three basic measures:

- restricting the scope of use of the IRB approach,
- introducing floors for capital requirements or for banks' own estimated risk parameters and
- providing greater specification of parameter estimation practices.

Of these measures, the proposal to provide further meaningful and effective supervisory specification of parameter estimation practices in standardised form is the most helpful in our view.

We therefore support in principle the approach calling for further standardisation of certain model requirements. Yet, at the same time, we should like to point out that any over-standardisation that results in all banks using the same model assumptions and calculation approaches impairs the stability of the system as a whole. Completely eliminating the variability in assessment between banks is not therefore desirable. Generally speaking, a start should thus be made on further harmonising the supervisory requirements for the IRB approaches. This goes particularly for the rules for PD and LGD risk parameter estimation. In its work programme set out in the *Regulatory Review of the IRB Approach* published in February 2016, the EBA has adopted a promising approach in this respect. This is one that should be pursued further. The ongoing review of internal rating systems (TRIM) by the ECB will also help to ensure this.

Thanks to the more strongly harmonised legal requirements particularly with regard to the definition of default, data histories and validation, and through accompanying measures such as, for example, supervisory benchmarking, as well as through ever longer data histories, we believe that comparable capital requirement levels can be achieved. As a result, RWA variability that cannot be explained by differences in banks' portfolio risk can already be reduced satisfactorily in our view.

Where uncertainty due to the data available exists, freedom in risk parameter estimation should be reduced. Pooling data from different banks could be a way of further removing such uncertainty.

Comments on the BCBS Consultative Document on constraints on the use of internal model approaches

2.1.3 Portfolio modellability

In addition, the BCBS proposes to permit use of the IRB approaches only where banks

- have sufficient data at their disposal in terms of both quality and quantity,
- have an information advantage over others (particularly credit rating agencies) and
- have generally accepted modelling techniques available that are capable of validation.

The first of these criteria (data availability) is quite understandable. Reliable estimates of probability of default (PD) and loss given default (LGD) are not possible without a certain amount of default data. This should not, however, mean that low default portfolios may generally no longer be treated according to the IRB approaches. Instead, an attempt should be made to define minimum requirements for the required default data jointly with banks. Use of the current IRB approaches should only then be ruled out if sufficient data is not available by these standards. Assessment of whether or not enough relevant data is available for internal modelling should be checked at individual bank level as part of the approval process.

But also in the case of portfolios where not enough data for risk parameter estimation is available, procedures for determining risk weights could be introduced that are more risk-sensitive than the standardised approach and at the same time make use of the knowledge banks possess of counterparty creditworthiness. A slotting approach whereby the counterparties in question are assigned risk weights based on predefined supervisory criteria would be conceivable.

The BCBS assumes particularly in the case of specialised lending that not enough data for reliable PD and LGD estimates is available. This is fundamentally wrong in our view. Specialised lending does not generally involve low-default portfolios. Particularly in the area of income-producing real estate (IPRE) finance, sufficient data justifying use of the IRB approaches is demonstrably available.

Over time, banks have built up a default history that allows estimation of an overall level of default rates. Furthermore, it is possible to quantify uncertainty included in these estimates. This estimation of uncertainty could be used to fix the level of conservatism to be applied. We nevertheless acknowledge that reliable estimation of default rates per rating grade can be a challenging task for some SL portfolios. Therefore, in order to reduce variability, we would rather support the idea of lower PD and LGD floors at portfolio level than abolishing the IRB approach for specialised lending altogether.

Moreover, banks have built up an enormous body of expertise on elaborate rating models. Rating systems for specialised lending therefore display remarkably high selectivity in a very large number of areas. This ability to distinguish between default-prone and less default-prone clients is confirmed and ensured by regular validation.

What is more, the extensive audits involved with the IRB approach SL models have also helped to establish an improved risk culture and risk sensitivity in these areas. Banks have got to know their portfolios very well. Reverting to the simple SL approach would negate all these efforts.

Comments on the BCBS Consultative Document on constraints on the use of internal model approaches

In addition, numerous banks use rating systems in the areas in question whereby risk parameter estimation is based on data pooled from several banks (pool model). As a result, the number of defaults increases; estimates become more reliable. In our view, the use of pool models is a suitable means of dispelling the BCBS's concern about the availability of data. For example, the pool providers of the savings banks and their central institutions, the *Landesbanken*, in Germany (RSU Rating Service Unit GmbH & Co. KG and Sparkassen Rating and Risikosysteme GmbH) have registered over 80,000 rating cases over a period of more than ten years, with over 2,000 defaults, in the IPRE segment. Using a Power/Gini, the level of selectivity over the past five years has been around 70% (time horizon of 0-12 months). In the project finance segment, around 25,000 rating cases have been observed, with over 200 defaults and an observed selectivity level of over 85% during the past five years. Even in the property finance segment, the selectivity level over the past five years has been over 70% despite the protracted shipping crisis (around 35,000 rating cases and over 2,000 defaults). Furthermore, default histories stretching back many years have been available in the project and property finance segments since the early 1990s.

The slotting approach (SA) would include coarse and partly subjective assessments of obligor characteristics. Aggregation of the assessments would involve mainly expert-based weighting. The SA approach would therefore increase, rather than reduce, the influence of expert opinion compared with current IRB approach simulation models. Though, on the one hand, simulation models need expert input in many ways, on the other hand many input parameters can be estimated based on externally or internally available data history. We therefore consider the results of CF simulation models to be less expert-driven than those under an SA approach.

Furthermore, the levels of capital a bank is required to hold under the slotting approach may not adequately reflect the level of risk taken, whereas the IRB approach is more precise and ensures that capital levels are commensurate with the risks.

In addition to developing expert-driven rating systems (slotting approach models) based on predefined supervisory criteria, banks must continue to use the existing internal models for specialised lending for Pillar II in future. Banks are thus required to develop, validate and use two models alongside each other. The consultative document lacks any incentives for developing an additional slotting approach model, however. The risk weights under the slotting approach are virtually identical with the risk weights for real-estate lending (IPRE and HVCRE) under the standardised approach to credit risk. As the risk attached to specialised lending may be rated much more poorly on the basis of the supervisory criteria, there will inevitably be undesirable developments at banks that adversely affect the stability of the financial system. High-risk business will then be backed by less capital than low-risk – and thus, in future, unprofitable – loans. To the extent that a reduction in variability for specialised lending is still needed, it should not be achieved by imposing constraints on the IRB approaches for specialised lending.

Not least, we should like to point out that restricting the scope of use of the A-IRB approach to exposures to corporates with annual revenues of less than EUR 200 million would result in the loss of data points for internal modelling by banks using the A-IRB approach. The significance of the model-based output obtained for IRB portfolios would decline as a result. This is reinforced by application of the criteria at consolidated level. According to our calculations, taking the present proposal as a basis, 30% of the customers currently modelled under the A-IRB approach would move to the F-IRB approach and defaults

Comments on the BCBS Consultative Document on constraints on the use of internal model approaches

in this area would then no longer be available for LGD calibration. If the criteria were to be applied at borrower level instead of group level, this proportion would drop to 10%.

What is more, restricting the A-IRB approach to corporates with consolidated annual revenues not exceeding EUR 200 million would also cause distortions in regard to the recognition of collateral. In this context, it is difficult to understand why the legal and economic effect of one and the same asset serving as collateral should depend on the size of the respective borrower. Modelling practice differentiates in this respect precisely between the borrower level and the collateral level, so that the same collateralisation situations – irrespective of the size of borrowers – are covered by the same modelling. Arbitrarily ‘pulling apart’ the methodology for determining secured portions of exposures according to the size of companies without any corresponding process-related differences thus inevitably produces distortions and inconsistencies in the changeover between the proposed size thresholds.

The second criterion (information advantage) fails to convince. For one thing, it can be said that in many areas in which the BCBS has put removal of the IRB approach up for discussion banks have better information at their disposal than third parties. This goes particularly for the area of specialised lending, where banks – unlike third parties – not only know exactly how projects are structured but also often have distinct rights of intervention. Elaborate processes deliver opinions on market value as well as payment flow forecasts in order to ensure the required objectivity and robustness of assessments. Estimation of PD and LGD for specialised lending poses a special challenge calling for detailed property and finance-specific knowledge.

Also where exposures to banks and large corporates are involved, banks are also likely to have an information advantage in regard to non-externally-rated customers. This is true, in our view, even in regard to externally-rated customers, as banks will usually have better information about a customer’s payment behaviour than, for example, an external credit rating agency.

To us, an information disadvantage compared with third parties is not sufficient grounds for prohibiting the use of internal rating systems. As with the data requirements, minimum standards should be developed jointly with banks for the required information, compliance with which allows the further use of the rating systems.

The use of internal rating systems allows banks, moreover, to respond quickly to a changing risk exposure. If the financial situation of borrowers deteriorates, this affects the manifestation of certain rating criteria. Accordingly, an increased risk exposure can be identified by internal processes. Heavy-exposure borrowers (large corporates and banks) are monitored particularly closely. Use of these risk flags results in these customers’ credit rating being lowered by banks earlier than by CRAs. Where the latter are concerned, the rating process is also delayed by the other objectives. CRAs weigh up investors’ need for information on the one hand and any self-reinforcing effects of early customer downgrading on the other hand. We thus believe that, thanks to the close monitoring of customers by banks, an internal model responds much faster to changing idiosyncratic risks and cases of declining creditworthiness can thus be addressed earlier by way of increased capital requirements.

We regard the third criterion (generally accepted modelling techniques) as dangerous. The desired reduction in modelling variability harbours the danger that banks will behave even more uniformly in

Comments on the BCBS Consultative Document on constraints on the use of internal model approaches

crisis situations. This may exacerbate crises. In addition, it diminishes the ability of banks to compare and use different modelling approaches in competition with one another. As a result, competition loses its crucial function as a means of discovering superior solutions. At the same time, it would make it more difficult for banks to obtain a competitive edge by improving their rating systems.

Internal rating systems are therefore a method of assessing creditworthiness that is at least equivalent to that of external credit rating agencies and other market participants. The BCBS thus rightly argues in its second consultative document on a review of the standardised approach that banks should not rely on external ratings issued by credit rating agencies but should always also perform their own analyses. The crucial advantage of internal rating systems is, not least, that – unlike external ratings – they allow banks full risk differentiation in their loan portfolios. Removing the IRB approaches for certain portfolios would mean foregoing the aforementioned advantages.

2.2 Use of floors

2.2.1 Floors for capital requirements (output floors)

The use of IRB capital floors based on standardised approaches is, in our view, unlikely to reduce variability in model results. Furthermore, the basic deficits of the standardised approaches such as

- the lower risk sensitivity that reduces, and does not improve, the comparability of the results;
- the overestimation and underestimation of risks due to wide-ranging supervisory standards which cannot appropriately reflect individual portfolio structures and cannot, or cannot adequately, cover the diversification and hedging effects; and
- the danger of gaming (the possibility of playing off the standardised approaches against each other, e.g. due to insufficient capture of basic risks)

will continue to exist even after the Basel reforms of the standardised approaches to market, credit and operational risk. Accordingly, we believe that standardised approaches are not suitable to serve as a floor for model-based capital requirements and therefore oppose the introduction of such a lower limit.

Depending on how the floors are designed, the proposed exposures classes remaining under the IRB approaches according to the consultative document may be subject to significantly higher capital requirements. Where a hard capital floor is set, the well-known misguided Basel I incentives would reappear particularly in the short term. To earn the higher cost of capital, riskier and thus higher-yield loans would be more attractive. At the same time, it would be more difficult for “good risks” to obtain terms in line with their own creditworthiness. Particularly specialist banks with low default and loss rates would be seriously handicapped as the risk spread assumed under the standardised approach to credit risk is not reflected, or not reflected to a sufficient extent, in their portfolios. The higher capital requirements and cost of capital would directly affect loan pricing. An adverse impact on lending would be highly likely. For this reason, we are against the introduction of an output floor.

Comments on the BCBS Consultative Document on constraints on the use of internal model approaches

2.2.2 Floors for risk parameters (input floors)

In our view, some of the proposed floors set out in Table 2 for the risk parameters estimated by banks themselves are unduly conservative.

PD floors:

The higher 10bps floor for QRRE revolvers makes no sense whatsoever to us. The database for estimation is broadest particularly in this area and the classical overdraft is certainly no riskier than a consumer loan, so that a specific margin of prudence does not appear appropriate.

There is evidence that the proposed PD floor of 5bps for some banks' retail real-estate lending is much too high. The data histories on default rates show that a spread of the extremely low default rates can be observed in this segment.

It should also be borne in mind that raising the PD floor means that more exposures would be assigned to the lowest PD bucket. There is already a relatively large percentage of exposures in the 3bps bucket today. It will increase further if the floor is raised. This is at odds with the general requirement to ensure that concentrations in any bucket are avoided when developing rating systems. What is more, raising the floor will cause losses of information in risk management, which is likely to impair risk management. With this in mind, we kindly request you to reconsider lowering the PD floor.

LGD floors:

When comparing the LGD floors for banks' own LGD estimates in Table 2 with the proposals for supervisory LGD under the foundation IRB approach in the table on page 9, we note that there are virtually no longer any equity-related incentives for banks to switch from the F-IRB approach to the A-IRB approach. This is an argument in favour of lowering the LGD floors in question significantly.

As an approach, setting uniform LGD floors is, in our view, too undifferentiated and thus inconsistent. While the level of collateralisation is taken into account in calculation of the LGD floor for partly secured exposures, heavily over-secured exposures would be assigned the same floor as fully secured exposures. Consideration should therefore be given to how the LGD floor for over-secured exposures can be lowered. Otherwise riskier lending would be encouraged.

Another problem, in our view, is that, when setting the LGD floors, the supervisory haircuts applied to the value of collateral have to be set at F-IRB approach level. It is questionable what the procedure is to be if no supervisory haircuts are available for eligible collateral under the A-IRB approach. The requirement to use supervisory haircuts must not lead, in our view, to the range of eligible collateral under the A-IRB approach being reduced. A better approach, in our view, would be gearing to the haircuts that banks apply in their own collateral management. In this case, the floor level would depend on the size of the collateral haircut applied by the bank.

The 20% LGD floors for "other physical assets" are unduly high in our view. This goes particularly for exposures whose main characteristic is comfortable collateralisation (asset-based lending). Such lending fails to reflect the level of collateralisation, i.e. the usually (significant) over-collateralisation. We shall explain this in more detail below for the car finance and car leasing segments. Yet, for other physical

Comments on the BCBS Consultative Document on constraints on the use of internal model approaches

assets as well, there are collateral disposal markets, independent assessors and pricing/price transparency mechanisms, as well as mechanisms for auditability of realised disposal proceeds.

The LGDs in the car finance and car leasing segments are very low throughout a business cycle and are well below the proposed floors. This is due, on the one hand, to the high collateral disposal proceeds in proportion to the value of the exposures and, on the other hand, to the usually high post-default recovery rates for car finance and car leasing business. As customers are dependent on their car, there is a pronounced willingness on their part to pay when they are faced with the termination of a loan and the real likelihood of losing the car.

There is, in addition, a functioning second-hand car market. Valuation of cars is highly transparent. In all large markets, there are agencies (e.g. in Germany, DAT, Eurotax Schwacke) which provide market data on second-hand car prices. Internet platforms such as AutoScout24, for example, also ensure transparency. Banks' own collateral disposal proceeds are available on a large scale to validate this data. For banks specialising in car finance and car leasing, there are established special processes for selling cars on the second-hand car market that ensure a good and quick sale. For such banks, cars are the most important type of collateral. Their car collateral portfolio is accordingly large.

In our view, a lower floor should be set for the aforementioned "other physical assets" such as cars, for example, and for mortgage loans. Given the wider range of collateral received and the over-collateralisation in many instances that makes risk costs resulting from exposures virtually improbable, only a flat floor of around 5% would be appropriate.

The 10% LGD floor for retail mortgages is also unduly high, as it does not take the level of collateralisation or over-collateralisation into account. In the case of low loan-to-value (LTV) ratios, the proceeds of mortgage collateral usually exceed the outstanding exposure amounts. In the case of mortgage loans with low LTV ratios, no or only negligible losses therefore arise. The LGD floor fixed for mortgage loans should thus depend on riskiness and the collateralisation situation.

In addition, we believe that the 25% LGD floor for receivables, particularly in relation to factoring business, is much too high: the average internally estimated LGDs in this area are, based on a history covering a period of many years, around 50% of the floor.

We are generally in favour of the floors being set at portfolio level. For finance under the A-IRB approach, the LGD floor set should depend on riskiness and the collateralisation situation (e.g. in the case of real-estate finance, graded according to LTV bands along the lines of the arrangements under the standardised approach to credit risk).

EAD floors:

It is not quite clear what the rationale behind the chosen EAD/CCF floor is, with on-balance-sheet exposure (already implemented) plus 50% of the off-balance-sheet exposure calculated by the CCF of the standardised approach. Currently, there are revolving products with really low drawing probabilities up to default (like, for example, credit cards), which will be severely punished by use of this floor. To implement such a floor in a risk-sensitive way, it appears that there are not enough categories under the standardised approach for a bank's broad product portfolio.

Comments on the BCBS Consultative Document on constraints on the use of internal model approaches

2.3 Parameter estimation requirements

Not only the current draft EBA guidelines and standards on the definition of default and estimating PD/LGD, but also the ECB's targeted review of internal models (TRIM), are a major contribution towards enhancing the consistency of internal model estimates. As already explained, the BCBS should build more strongly on these sensible European activities.

Based on the proposals made by the BCBS, but also by the EBA, banks face massive adjustments of their IRB approaches. The heaviest burden is likely to be imposed by modifications of PD and LGD risk parameter estimation. It should be borne in mind in this respect that the attractiveness and efficiency of the IRB approaches in internal management will decline if adjustments called for by supervisors have to be implemented although these do not lead to any direct improvement in internal management but merely serve the purpose of making it easier to compare models operated by different banks. The proposed level of standardisation and the cost of implementation should therefore be properly balanced.

2.3.1 Probability of default (PD)

The proposals envisaged in this area do not, in our view, go in the right direction, while other important proposals – by, for example, the EBA on the definition of default – to achieve more consistent PD estimates are missing.

The BCBS wants to put an end to the co-existence of point-in-time (PIT) and through-the-cycle (TTC) estimates. We reject this. For one thing, we believe that harmonising the way PD is estimated will only reduce variability in estimates to a small extent. This is also due to the fact that hybrid PIT-TTC systems dominate in practice (see, for example, the EBF analysis of the European IRB approaches for residential property).

For another thing, the requirement to use TTC approaches is neither appropriate nor likely to reduce complexity in our view. It ultimately leads to greater methodological variability and poorer verifiability compared with a PIT approach. This is because both fixing a business cycle and splitting effects into idiosyncratic, industry-specific or business-cycle are highly arbitrary. They would leave room for interpretation that would be odds with the aim of harmonising calculation of RWAs. In particular, a pure TTC rating system would not, in our view, be suitable for use in bank management.

What is more, pure TTC models would have to be developed for IRB approach purposes that cannot or must not be used for other purposes (e.g. EBA stress testing or IFRS 9). Ultimately, banks would be required to develop, validate and maintain two different rating systems. This double burden does not appear justified in our view should the scope of use of the IRB approaches be restricted.

In practice, so-called 'master scales' are often used, i.e. the rating scale is used identically for different portfolios and the PDs in the individual grades are fixed permanently. Because of the PD estimation requirements, the use of such master scales would no longer be possible in future as, on the one hand, assignment of ratings is not allowed to change over time but, on the other hand, the PD estimate assigned to the rating grade has to be regularly updated. The PD estimates for different portfolios would

Comments on the BCBS Consultative Document on constraints on the use of internal model approaches

in this way naturally drift apart. Contrary to the BCBS's proposals, the requirements with regard to a through-the-cycle character of PD estimation should not be formulated as a requirement for the rating scale used but merely refer to PD.

In addition, it remains unclear whether the requirement that "[a]t a minimum, PD should be estimated for each rating grade" refers to the granularity of the rating scale. As explained, master scales are often used identically for different portfolios in practice, so that granularity is geared to the requirements of these portfolios. In some portfolios, no conclusions are thus possible for certain areas of the rating scale or conclusions may only be possible after aggregation of different rating grades, as the rating scale may be too granular for a specific portfolio. The BCBS's proposals should not lead, in our view, to excessive requirements being set for the rating scales. Instead, a requisite level of granularity should be prescribed and the calibratability of systems checked at this level.

In the *Additional guidance for completing the IRB quantitative impact study*, paragraph 462 addresses the question of weighting in determining the long-term default rate. It should, in our view, be made clearer that determination of the long-term default rate should be based on a numbers-weighted approach, while the weighting of annual default rates into an average aggregate default rate may be situation-based (cf. the requirements in paragraph 466 on the representativeness of good and bad years).

2.3.2 Loss given default (LGD)

2.3.2.1 Foundation IRB approach

A flat 50% haircut is unduly high for many types of fungible collateral such as cars, for example (section 4.2.2.). Application of a haircut is designed to achieve a conservative valuation of collateral that can be realised also during a stressed period. The high and undifferentiated haircuts must be rejected, as they will lead to wrong incentives on a massive scale when it comes to taking collateral into account in lending and to significantly higher capital requirements. This would have adverse effects on the real economy and financial stability. As already explained above, there are functioning markets for many types of collateral where valuation is transparent. Sufficient historical data for determining a haircut is therefore available. Individual haircuts for the respective asset classes should therefore be envisaged. For collateral in the form of cars, for instance, Eurotax Schwacke analyses show that second-hand car prices for three-year reference vehicles fluctuated by no more than 15 percentage points throughout a business cycle in the European markets examined. A 15% haircut would therefore appear to be appropriate in this area.

The 50% haircut for collateral in commercial real-estate (CRE) business is likewise much too high. The second consultative document on the standardised approach to credit risk already proposes a real estate value calculated on a sustainable basis and an additional LGD floor of 15%. In aggregated terms, this haircut on market value is too high even in a boom phase. A permanent haircut of 50% on sustainable market value is thus far too high. We therefore recommend setting either a flat 30% haircut or one published for each country based on the current state of the market (e.g. a figure set by supervisors for twelve months in each case based on market performance in the respective country).

Comments on the BCBS Consultative Document on constraints on the use of internal model approaches

2.3.2.2 Advanced IRB approach

Treatment and calibration of downturn LGDs are outlined in several sections: Sections 4.2 sets the general downturn LGD floors for F-IRB and A-IRB approaches. Furthermore, in Section 4.2.2 the BCBS proposes an increase in haircuts “to reflect downturn conditions”. Calibration of haircuts and estimation of LGDs are performed in conjunction and should be considered as one set of parameters. We therefore believe that inclusion of downturn add-ons in LGD as well as haircuts is excessive and will lead to an unjustified increase on capital.

We do not believe it would be appropriate to apply a floor to the downturn add-on in addition to the other floor, as the LGD applied should always be appropriate to a downturn. Clearer wording would be advisable at this junction. It would also make sense to define a downturn situation more precisely at supervisory level and to further specify the requirements for calculating downturn LGD, in this way improving the comparability of estimates.

It is not clear whether the specified floors are to be fulfilled separately for secured and unsecured exposures or whether they should first be used to calculate a single exposure-weighted floor which sets the overall minimum level for the effective LGD floor (section 4.2.4). Since the unsecured floor is not provided for mortgages, calculation of an exposure-weighted average is not possible. At the same time, due to the application of haircuts, it is unlikely that full (100%) collateralisation can be achieved for any portfolio. We would therefore welcome a consistent way to calculate the required floor without differentiating between fully or partially secured.

We understand the text to mean that it sets a requirement to use the haircuts for collateral valuation set out in the standardised approach also in the A-IRB approach and that these haircuts should be increased. It is not clear why the A-IRB approach should be restricted again here. Collateral valuation is one important part of LGD estimation. Banks are no longer allowed to estimate their own collateral haircuts; the influence of internal estimation is in fact restricted significantly. It is not clear why this restriction is necessary. There is sufficient data for banks to estimate their own collateral haircuts. Furthermore, we see the proposed figures, e.g. the 50% haircut for CRE/RRE, as much too conservative.

2.3.3 Exposure at default (EAD) and credit conversion factors

Banks have built up a very good body of expertise on EAD over the years. This has led to them, for example, analysing their product portfolio in more detail and finding the best solution for integrating it into risk calculation, obtaining a better risk awareness in regard to EAD for the business side, etc. Restricting use of the IRB approaches to very few products and portfolios now will mean a loss of this expertise in the coming years. The importance of EAD will decrease significantly. The supervisory EAD model is – in itself – already very conservative, as the on-balance-sheet exposure is the minimum for calculation of EAD. For some products, especially for non-revolving products, this leads to a massive over-estimation of EAD. This overestimation will be increased by using the parameters under the standardised approach for non-revolving products and by using the proposed floors for revolving products.

Comments on the BCBS Consultative Document on constraints on the use of internal model approaches

The additional requirements for determination of EAD proposed in the consultative document are basically already met for the IRB approach estimates. What is not clear is what is meant by the requirement that "*EAD estimates must use a 12-month fixed horizon estimation approach*". Intensive analysis has shown that much better results can be obtained by taking not only credit lines into account that do not exist 12 months before default but also credit lines that, for example, started 10 months before default. This is much closer to reality and therefore leads to much better results. This means that we support the approach of taking into account credit lines defaulted within the next 12 months and not exactly in 12 months.

When estimating EAD, overdue interest payments and limit excesses should also be expressly taken into account. It should be made clear in this context how limit increases between the point of estimation and the point of default are to be handled.

Dropping recognition of conditional guarantees under the A-IRB approach basically makes sense in our view. The range of eligible guarantees should not, however, be made too narrow by the definition of conditional guarantees.

2.3.4 Credit risk mitigation

That fact that the BCBS's proposals would unduly reduce the capital-reducing effect of physical collateral poses a problem. Under the standardised approach, only real-estate collateral can be recognised as risk-mitigating. This means that other physical collateral in connection with exposures to corporates with total assets exceeding EUR 50 billion would no longer have a risk-mitigating effect.

German promotional banks, among others, would be adversely affected by the reduction in the range of eligible collateral. In promotional business, loans are provided mostly through other banks (local banks, possibly central institutions of savings bank and cooperative bank groups). In such cases, the promotional bank has an exposure to another bank. For collateral purposes, the banks passing through the loans assign the claims against the borrowers to the promotional bank that originally granted the loans. If the claims assigned can no longer be recognised as collateral by the promotional bank under the standardised approach, the result will be a significant increase in capital requirements for the promotional bank. This will impair their lending capacity, which is at odds with the economic purpose of such banks.

Yours sincerely,

on behalf of the German Banking Industry Committee
Bundesverband deutscher Banken



Dirk Jäger



Dr Uwe Gaumer